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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,578	02/14/2002	Wilhelm Aichele	HOE-678	1576

20028 7590 12/30/2003

LAW OFFICE OF BARRY R LIPSITZ  
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EXAMINER

HAMILTON, ISAAC N

ART UNIT PAPER NUMBER

3724

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/077,578

Applicant(s)

AICHELE, WILHELM *cd*

Examiner

Isaac N Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36,37,39-54 and 56-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36,37,39-54 and 56-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 05.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Cancellation of claims 1-35, 38 and 55 is acknowledged.

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 06/11/2003 was considered on 07/28/03. It is believed that a copy of the signed IDS was inadvertently not included with Paper No. 08, mailed 08/14/2003. A copy of the signed IDS is included with this Office action.

***Drawings***

3. The drawings were received on 10/15/2003. These drawings are acceptable.

***Specification***

4. Objections to the specification are hereby withdrawn.

***Claim Rejections - 35 USC § 112***

5. Rejections made under 35 USC 112 are hereby withdrawn.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 36, 37, 52, 53, 54, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kesten (4,455,903) in view of Strouse, Jr. (5,857,396). Kesten discloses machine frame 18; anvil roller 12; cutting and embossing tool 14, also note the abstract; cutting and embossing edge shown attached to tool 14 in figure 1. Kesten does not disclose a cutting tool biased essentially parallel to its axis of rotation. However, Strouse, Jr. teaches cutting tool 25 biased essentially parallel to its axis of rotation in column 4, lines 4-21. It would have been obvious to provide a cutting tool biased essentially parallel to its axis of rotation in Kesten as taught by Strouse, Jr. in order to eliminate axial play in all the bearings as recited in column 2, lines 28-46 in Strouse, Jr. It is noted that Strouse, Jr. also teaches that the cutting tool is subject to a tensile load in column 10, line 47. Note in column 2, lines 15-20 Strouse, Jr. describes that maximum force amplitude, which is referred to as "play" by Strouse, Jr., is controlled to be within acceptable limits. "Acceptable limits" in Kesten is equivalent to "predetermined values" in Strouse, Jr.

8. Claims 39-48 and 56-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kesten and Strouse, Jr. as applied to claims 36-38, 54-55, 69 and 70 above, and further in view of Wilson (5,452,634). The combination discloses everything as noted above and discloses supporting rings 24 in Kesten, but does not disclose an outer sleeve, an inner section and form-locking connections. Wilson teaches outer sleeve 63 and 13, inner section 37 and form-locking connections 65. It would have been obvious to provide an outer sleeve, inner section and form-locking connections in the combination as taught by Wilson in order to secure the material being cut with vacuum pressure. Note the tensional force, tensile stress and tensile

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load are disclosed in Strouse, Jr. in column 10, line 47. Note the form-locking means has a contact surface juxtaposed between the head of screw element/form-locking element 65 and outer sleeve 63, and the contact element is the head of the screw. In figure 2, the form-locking elements are adapted to the diameter and the span of the cutting tool.

9. Claims 49-51 and 66-68 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claims 39-48 and 56-65 above, and further in view of Mayer et al (5,074,180), hereafter Mayer. The combination discloses the claimed invention except for radial expansion of the supporting rings by means of an expansion device. However, Mayer teaches radial expansion of the supporting rings by means of an expansion device in columns 4 through 5, lines 61-30. It would have been obvious to provide radial expansion of the supporting rings by means of an expansion device in the combination as taught by Mayer in order to adjust the axial position of the supporting rings. Note form-locking element 17.

### ***Response to Arguments***

Applicant's arguments filed 10-15-2003 have been fully considered but they are not persuasive. Applicant asserts that Strouse, Jr. does not disclose that the cutting tool is biased essentially parallel to its axis of rotation by bracing the cutting tool with such a force that a maximum oscillation amplitude of the cutting tool is below a predetermined value. However, it is believed that Strouse, Jr. does disclose this. In Strouse, Jr. the arbor 25 has cutting tools fixed to it. The arbor is therefore interpreted to be part of the cutting tool. "Play" as it is used in the Strouse, Jr. reference is equivalent to "a maximum oscillation amplitude" because this term is not defined in the claims and is interpreted as the amount of movement in the direction essentially

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parallel to its axis of rotation. It is believed that oscillation can occur in the direction parallel the cutting tools axis as much as it can occur in the direction perpendicular to the axis of the cutting tool, as is intended by the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Hamilton whose telephone number is 703-305-4949. The examiner can normally be reached on Monday thru Friday between 8am and 5pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 703-308-1082.

In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-1148.

IAH

IH

December 22, 2003



Allan N. Shoap  
Supervisory Patent Examiner  
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